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April 11, 2002

Robert Beraud
Wallula Project Comments
BPA Communications Office KC-7
P.O. Box 12999
Portland, OR 97212

Re: Wallula Power Project (DOE/EIS-0330)

Dear Mr. Beraud:

I would like to submit the following comments on the Draft Environmental Impact Statement for the Wallula Power Project and Wallula-McNary Transmission Line Project.

I. Discussion of Alternatives

The analysis of alternative actions is the heart of the environmental impact statement, according to the regulations implementing the National Environmental Policy Act. This section of the EIS is required to "rigorously explore and objectively evaluate all reasonable alternatives", thus "sharply defining the issues and providing a clear basis for choice among options for the decision maker and the public." (40 C.F.R. 1502.14). Any meaningful evaluation of a proposed project requires looking at an adequate range of alternate choices. 28-1

But the analysis of alternatives is stunted in this draft EIS. Only two minor modifications to the proposed action are included in the statement: (1) an alternate tower height (165 feet instead of 145 feet) and longer span design (1500 feet rather than 1150) for the transmission lines, and (2) an alternate approach of the transmission lines to the McNary substation.

The extremely constricted range of the alternatives explored is apparent as one reads through each section covering the project impacts on existing conditions. The two alternatives make very little difference in the impacts. The section on air quality is typical: 24 pages of text, 12 tables, and 3 illustrations describing the effect of the proposal on existing air quality, and one sentence for each alternative: "This alternative would not substantially change the air quality impacts compared to the proposed alternative." The paucity of discussion about any difference either alternative makes is reflective of how little the base proposal was tweaked. At the same time several other more substantive alternatives are described and dismissed, some with very little discussion of the reasons for the dismissal. At least three warrant fuller consideration. 28-2

Alternate Natural Gas Plant Designs

The only alternate gas-fired generation plant design mentioned – and rejected – was for a power plant larger than the proposed 1,300 MW plant. A larger plant was rejected for three reasons:

1. Walla Walla County is a moderate non-attainment area for particulate emissions governed by the Clean Air Act, so new projects have to offset emissions by procuring the cessation of existing emission sources. The proposal would purchase emission offsets primarily from nearby agricultural and feedlot sites, and as the size of the project rises so does the cost of retiring farmland to offset increased emissions.
2. Water availability for cooling purposes is restricted to existing water rights, and a larger project would either have to obtain additional costly water rights or rely on a more costly dry cooling system. 28-3
3. The present Bonneville Power transmission system has limited capacity at the proposed site. Additional transmission needs for this proposed 1,300 MW Walulla plant and for the nearby proposed 1,200 MW Starbuck Project will require line upgrades downstream from the McNary substation. Integrating any larger plant into the Bonneville grid near the proposed site would require additional upgrades and circuit additions that would drive up the project cost.

These concerns all suggest that a smaller natural gas plant, or a series of smaller plants that together would generate the same 1,300 megawatts, are proposal alternatives that warrant consideration. No explanation is given for not considering the alternative of a smaller plant.

In a white paper on distributed power sources the U.S. Department of Energy says that increasingly reliable and efficient combined-cycle natural gas generators have lowered the optimal size for a generating plant from 1000 MW in 1980 to 100 MW and even 10 MW today. Smaller plants could be sited based on current transmission capacity, greatly lowering the environmental disruption and overall economic costs. Smaller plants could be sited near the least expensive land and water resources. Transmission energy losses would be lessened if smaller plants were sited closer to consumption areas. The white paper quotes a Pacific Gas and Electric Company study finding that some utilities spend $1.50 to distribute power for every $1.00 spent producing it, data supported by the Federal Energy Information Administration. Smaller plants would introduce more flexibility into the power grid, enabling generational capacity additions and reductions that more closely match demand. 28-4

Alternate Power Generation Technologies

Solar and wind power alternatives are dismissed with single short paragraphs. Wind is characterized as unreliable because of the variability of wind speeds. But BPA itself is actively promoting wind projects as particularly attractive because they can come online in a relatively short time, they offer power that is competitively priced with other sources such as combustion 28-5

turbines, they are relatively easy to site and expand, and they have low environmental impacts. Wind power should not be so summarily dismissed. 28-5 contd

The single reason put forward for rejecting solar parabolic-trough technology as an alternative is glaringly inadequate: parabolic-trough technology would require more land. Solar would require 6,500 acres to generate 1,300 MW compared with the 97 acres the current proposal requires. But the current proposal also requires retiring 1,300 of active farmland to obtain particulate emission offsets, and additional economic and environmental costs not considered in the one-sided comparison in the DEIS.

A more reasonable comparison of solar power generation to the proposed natural gas generation plant would offset the 6,500 acres of non-farm, non-industrial land without water rights required for solar to the costs of (1) purchasing 1,300 acres of farm land, (2) purchasing 1,800 acre-feet per year of existing water rights, (3) the construction and annual maintenance of 5.9 miles of natural gas pipeline, and (4) the daily use of 225 million cubic feet of natural gas. The comparison should include both economic costs and environmental disruptions. And because solar generation would not require nearby water resources and natural gas supplies, transmission costs for solar would probably be less than for gas because plant siting could be partially based on the existing transmission capacity. 28-6

II. Discussion of Cumulative Effects: Natural Gas Supply

Table 3.17-1 lists sixty newly built or proposed power generation plants in the Pacific Northwest. Because it is unlikely that all the proposed plants will be built, BPA has identified fifteen plants, including the Walulla Project, as a "Baseline Source Group" for purposes of addressing likely cumulative effects. These plants are now online, under construction, or likely to receive approval. This Baseline Source Group is used most extensively in the DEIS to analyze cumulative impacts on air quality, and in particular the impacts on Class I areas in Washington and Oregon. Class I areas are typically wilderness areas and national parks, and most of the fifteen power projects are combustion turbines that will be operated near Class I areas.

The cumulative effect of these fifteen proposed plants on existing natural gas supplies is also analyzed, but in an extremely truncated manner. The fifteen proposed plants will double natural gas consumption in the Pacific Northwest and the full ramifications of this increased demand are not explored. The Canadian transmission system supplies about 80% of the gas used in the Pacific Northwest, while 20% is supplied from southwestern and plains states. Natural gas consumption in 2000 used 53% of the capacity of the Canadian system, and if all sixty newly built and proposed power generation plants in the Pacific Northwest went online demand would exceed capacity by 63%. The DEIS analysis uses the more probable assumption that only the Baseline Source Group projects will be built. The combined requirements of these fifteen projects will double current natural gas consumption in the region, to 106% of the existing 28-7

Canadian transmission capacity. The Wallula Project alone will use 225 million cubic feet a day, or 7.5% of the capacity of the Canadian system.

The DEIS adopts the projections of the National Gas Association that future advances in technology, investments in the gas transmission and production infrastructure, and the large portion of British Columbia that remains unexplored and implies additional gas discoveries, will together add reserves and capacity at a rate commensurate with demand. The discussion ends abruptly with the statement that "Regardless of current supply and demand, the use of gas, its cost, and the potential for new gas reserve development are determined by market forces not evaluated in this EIS." 28-7 contd

But this increased demand for natural gas is the foreseeable result of individual decisions of the Bonneville Power Administration. The current proposal is to license yet another gas-fired generation plant when new and proposed plants will double natural gas demand in the Pacific Northwest over the next three years. Licensing this plant is a "cumulative action, which when viewed with other proposed actions [will have] cumulatively significant impacts and should therefore be discussed in the impact statement." (40 C.F.R. 1508.25(a)(2)) The DEIS should look at the impacts of short-term disruptions in natural gas delivery and pricing as these fifteen power plants ramp-up demand to twice the current level.

Last summer California and to a lesser extent the Pacific Northwest experienced electrical supply disruptions. There were immediate calls to loosen air quality standards to allow power generation using diesel generators and even diesel locomotives. Environmental concerns are quickly set aide when the electrical supply is threatened. Licensing gas-fired plants one at a time has precisely the cumulative effect on the human environment that Federal decision makers are charged with considering, and an adequate treatment of cumulative effects in the EIS will enable this consideration. 28-8

Thank-you.

Sincerely,

Mike Healy

Responses to Comment Submission 28, Letter from Mike Healy, Brier, WA

28-1. Please see responses to comments 9-9, 27-9, and 27-10.

28-2. Please see responses to comments 9-9, 27-9, and 27-10.

28-3. EFSEC siting guidelines provide that EFSEC make a recommendation to the Governor to approve, deny, or approve with conditions applications before the Council. EFSEC must consider the impacts of the specific proposal presented for review. A smaller plant option was not proposed by the applicant or by commentors in the scoping process. Bonneville considers alternatives under NEPA when natural resource conflicts arise. Bonneville feels that none have arisen in this case sufficient to require examination of more alternatives than were already considered.

28-4. Please see response to comment 28-3.

28-5. Please see response to comment 19-9.

28-6. Please see response to comment 19-9.

28-7. Cumulative impacts of increased natural gas use are included in the Final EIS, Chapter 3, Section 3.17. We have no reason to know that increasing the demand will cause disruptions in service, although the analysis shows that more supplies will be needed if many of the power plants are permitted and built. Pipelines are in the planning and permitting process at this time and more will be built. If more gas is needed than gas providers want to provide for, there will be a shortage. Overall, there is no gas resource shortage expected over the life of this project.

28-8. The demand for electricity is the Pacific Northwest is expected to continue to rise. New generation and transmission line reinforcement are two points of a seven-point program recommended by Bonneville to maintain a stable price for electricity in the Pacific Northwest. The shutdown of more than 3,000 MW of power to industry last year is one of the main reasons that blackouts were not experienced in the West. Conservation and renewable energy production are additional strategies that Bonneville has been actively pursuing. This project is but one piece of a larger picture that includes much more than licensing gas-fired plants.